SUPPORTING INFORMATION

Electrochemical genosensor for the rapid detection of GMO using loop-mediated isothermal amplification

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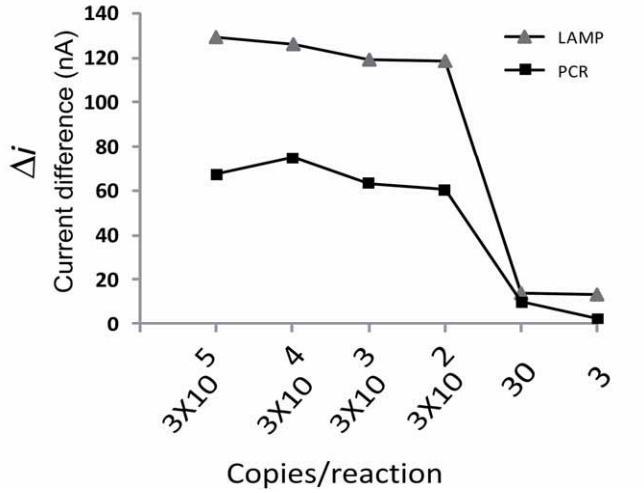

Figure SI-1. Current difference (Δi) Vs copy number/reaction of 4×diluted LAMP products and 2×diluted PCR product using only the DEP chips. H33258 used as DNA binder and oxidizing agent. CBH 351 specific LAMP and PCR primers were used here for target real-sample amplification. Currents were measured using LSV as mentioned in the experimental section.

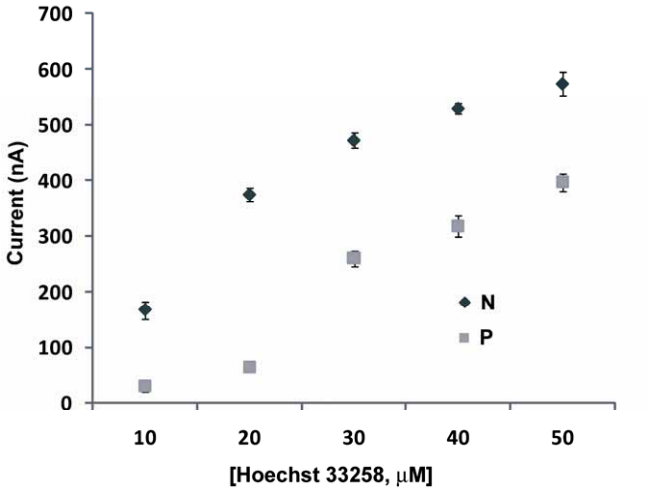

Figure SI-2. Optimization of the H33258 concentration (10-50 μM) in the presence (P) and absence (N) of 4× diluted LAMP DNA. The best current difference was observed for 20 μM and as such it was used for further studies. All experiments were carried out at ambient temperature (23-27° C). Error bars indicate the standard deviation of at least three replicated measurements.